

REMARKS

The Office action of March 13, 2005 has been carefully considered and the application has been amended accordingly.

Claims 1, 4-14 and 17-19 are presented for consideration.

Originally presented claims 1-16 were variously rejected as being anticipated under 35 United States Code 102(b) by patents to Aoyagi *et al.*, Kindt-Larsen *et al.*, Cohen; and/or Mukasa *et al.*

Parent claim 1 has been amended to include, *inter alia*, that the dental material container includes a body for receiving a receptacle which in turn receives a plunger. Unlike the cited patents, such as Mukasa *et al.* (US 6,386,872) depression of the plunger causes a rupturing of a first wall in the receptacle by an increase in pressure within the receptacle, rather than by piercing the wall with the rod-like projection 3a (FIGS. 1-4). Likewise, the patent to Cohen has a projection 25, and the application to Aoyagi *et al.* has a projection 3a. The cited documents utilize such a projection which physically contacts the first wall with the projection penetrating the wall thereby creating an opening and is also used to penetrate the second wall. In applicants' claimed device, once the material from within the receptacle has been expelled from the first chamber and mixed with a second dental material in the second chamber, further depression causes movement of the receptacle to expel the

mixed material from the second chamber by increasing the pressure within the second chamber and thereby rupturing the second wall.

While the device shown in Kindt-Larsen et al. (US 5,114,240) uses separate membranes that are not broken by a physical projection, the mixing of the two substances is caused by movement of the receptacle into the body of the device, rather than material within the first chamber being expelled by depression of a plunger while the receptacle stays in place. One disadvantage of such an arrangement is that the pressure build up causing the breakage of the wall that allows the mixing of the material is within the chamber closest to the nozzle. It is therefore required to have a stopper over the nozzle opening, as shown in the patent FIGS. to prevent breakage at the same time of the membrane across the nozzle opening. Before extrusion, this stopper is required to be removed.

A further difference with the device of US 5,114,240, is that, in the patent, because the receptacle moves inside the body during the mixing phase, the venting of air during application of the material is via the back of the receptacle. The patent specification describes venting and filter assembly (12, 15) at the rear of the receptacle. This arrangement has the problem that the vent is always exposed to air, increasing the possibility of moisture entering the materials before use. In the present invention, the means to expel air vents from the

second chamber (adjacent the nozzle) which is not exposed until after the materials have been mixed.

Also, the device of US 5,114,240 uses separate "membranes" that can cause leakage between the imperfections in the sealing of the two membranes, as well as through the interface between the first and second chambers. The device of the present invention uses a thinned section of the integral wall member such that, when sealed by the plunger, the receptacle provides a sealed chamber which prevents liquid loss.

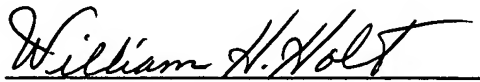
New claims 17 and 18 are directed towards the means for expelling air from within the second chamber of the container during use and are allowable with amended parent claim 1, as discussed above. Claim 18 includes a specific recitation of applicants' grooves 62 in chamber 44. Claim 19 depends from amended claim 14 to recite the separate member as being a disc.

In a separate document, applicants' have requested the required extension of time for responding to the outstanding Office action.

In view of the foregoing amendments and remarks, reconsideration of the application is requested and allowance of claims 1,4-14 and 17-19 is courteously solicited.

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Respectfully submitted,



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